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THE COLLARED LEMMING (*DICROSTONYX*) FROM THE PENNSYLVANIA PLEISTOCENE

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Excavations at sinkhole no. 4, 1.5 miles northeast of New Paris, Bedford County, Pennsylvania (lat. 40° 7′ N, long. 78° 37′ W, alt. 1,500 feet) by Carnegie Museum/National Speleological Society field parties have added many new species to the poorly known late Pleistocene fauna of the state. These include *Pedioecetes phasianellus, Citellus tridecemlineatus, Synaptomys borealis, Phenacomys* cf. *ungava, Microtus xanthognathus,* and the extinct *Eptesicus grandis, Tamiasciurus tenuidens* and *Mylohyus pennsylvanicus.* A Carbon 14 date, from flakes of charcoal in the associated matrix, of 11,300 ± 1000 Before Present was obtained by Yale University, sample no. Y-727. The fauna post-dates the maximum extension of the Wisconsin glaciation.

Matrix from the 20-foot level excavated 21 October 1960 was washed and screened to recover bones and teeth of the smaller forms on 16 June 1961. A fragmentary maxilla bearing M^1 and M^2 and a right and left mandible with complete dentition (Carnegie Museum Section of Vertebrate Fossils Catalog Number 6258) were recovered from the same washing screen. They are probably parts of a single individual. We have identified them as *Dicrostonyx hudsonius* (Pallas). Dental distinctions as discussed by Miller (N. A. Fauna, 1896, no. 12, p. 39) and Hall & Kelson (Mamm. of N. A., 1959, pp. 765, 767), and direct comparison with specimens of *D. hudsonius* (Pallas) from Ungava and *D. groenlandicus* (Traill) from the Mackenzie River delta, N. W. T. in the collections of Carnegie Museum, make it apparent that the Pennsylvania specimens are indistinguishable from mod-

ern *D. hudsonius* in all characters of the dentition. They differ from *D. groendlandicus* in just those points that distinguish the latter from *D. hudsonius*. Cursory inspection of two mandibles of *D. torquatus* (Pallas) from the Pleistocene of Poland lead us to believe that *D. torquatus* and *D. groenlandicus* may be more closely related than either is to *D. hudsonius*. The discovery of what was ostensibly a form endemic to the tundra of northern Quebec and Labrador, 1,200 miles to the south during the late Pleistocene presents an interesting problem in speciation and Pleistocene zoogeography which we hope to pursue further in the near future. The excavation of sinkhole no. 4 is incomplete at the present writing. We have reason to believe that more *Dicrostonyx* material will be recovered as excavation proceeds deeper.

This is the first record of an unequivocal tundra rodent from the Pleistocene of the Appalachian Mountain region. *Dicrostonyx* is known from the Pleistocene of Europe but has not heretofore been recovered from the North American Pleistocene to our knowledge.

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